Before the
Federal Communications Commission
Washington, D.C 20554

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| In the Matter of | ) | |
| | ) | |
| Inquiry Concerning the Deployment of | ) | |
| Advanced Telecommunications | ) | |
| Capability to All Americans in a Reasonable | ) | GN Docket No. 04-54 |
| And Timely Fashion, and Possible Steps | ) | |
| To Accelerate Such Deployment | ) | |
| Pursuant to Section 706 of the | ) | |
| Telecommunications Act of 1996 | ) | |

**COMMENTS**
**OF THE**
**NATIONAL TELECOMMUNICATIONS COOPERATIVE ASSOCIATION**

The National Telecommunications Cooperative Association (NTCA)[1] submits these comments in response to the FCC's (Commission's) March 17 Notice of Inquiry (NOI or Notice)[2] into "whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion."[3]

NTCA is uniquely positioned to comment on broadband service in rural areas. Each year, NTCA conducts a survey of its member companies' broadband activities. The

[1] NTCA is the premier industry association representing rural telecommunications providers. Established in 1954 by eight rural telephone companies, today NTCA represents more than 560 rural rate-of-return regulated telecommunications providers. All of NTCA's members are full service incumbent local exchange carriers (ILECs) and many of its members provide wireless, cable, Internet, satellite and long distance services to their communities. Each member is a "rural telephone company" as defined in the Communications Act of 1934, as amended (Act). NTCA's members are dedicated to providing competitive modern telecommunications services and ensuring the economic future of their rural communities.

[2] *In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, GN Docket No. 04-54, FCC 04-55, March 17, 2004.

[3] Telecommunications Act of 1996 (Act), Pub. L. 104-104, 110 Stat. 56 (1996), § 706(b).

survey results are then compiled into a report that is publicly available from the NTCA Web site at www.ntca.org.

The most recent NTCA Broadband Survey was just conducted. Responses to this survey are now being compiled and a report of the results will be presented similar to previous surveys.[4] The survey results present an interesting snapshot into the current broadband activities of NTCA member companies.

## I. ADVANCED TELECOMMUNICATIONS CAPABILITY DEPLOYMENT TO ALL AMERICANS

In the Notice, the Commission asks whether advanced telecommunications capability is being deployed to all Americans. The recently completed NTCA Broadband Survey offers some insight into deployment in rural America. The survey results paint a picture of small providers working hard to provide advanced services to their customers, despite the often significant obstacles they must overcome. In fact, survey respondents indicate that they consider the provision of broadband to be extremely important both to their standing in their community as the telecommunications provider of choice, and to their overall bottom line.

Survey results show that many rural ILECs are using DSL with fiber-fed nodes to offer broadband to most of their subscribers. However, most of the subscribers located more than 5 to 7 miles from the serving central office or remote switch are not offered DSL service. In general, less than 5% of those customers with broadband availability actually subscribe. At this time most rural ILECs cannot justify the expenditure to deploy DSL ubiquitously. The cost to offer DSL on the longest loops is generally

[4] *NTCA 2004 Broadband Survey Report*, forthcoming. Will be available online at www.ntca.org.

prohibitive and universal deployment of broadband throughout the service area of most rural ILECs remains an unachieved dream.

The Commission also asks for input on economics of network investment and service deployment. Rural carriers have always faced major economic challenges. National policies supporting universal telephone service have enabled rural carriers to provide comparable telecommunications services throughout their service areas. Today, rural carriers again face a new challenge—how to bring advanced services to their service areas despite high costs. A major impediment facing rural providers is low density in their service areas, with commensurate higher costs per customer. Survey respondents serve, on average, only 3.2 lines per square mile, yet these companies are offering broadband services to most of their subscribers.

Another major economic hurdle that rural providers must face is the often substantial distance to the LATA tandem switch. The 2004 Broadband Survey asked respondents the distance to the LATA tandem. The responses were as follows:

| **Distance to LATA Tandem** | **% of Respondents** |
|---|---|
| < 25 miles | 26.7% |
| 26 - 50 miles | 31.1% |
| 51 - 75 miles | 15.5% |
| 76 - 100 miles | 12.4% |
| 101 - 200 miles | 12.4% |
| 201 - 300 miles | 1.2% |
| 301 - 400 miles | 0.6% |
| > 400 miles | 0.0% |

As the table shows, 73% of survey respondents must transport traffic 26 miles or greater to the nearest LATA tandem, and bear the associated costs. Further, more than 25% are 75 miles or further from a LATA tandem and in the extreme some are hundreds of miles

from the LATA tandem. These rural ILECs will have to overcome major cost obstacles for both their customers on long loops and for the high transport cost to the LATA tandem in order to offer universal availability of broadband.

More than three-quarters of survey respondents indicated that they are utilizing fiber-fed nodes to extend the reach of their digital subscriber line (DSL) service. Fiber-fed nodes are often extended quite far from the end office--an average of seven miles for survey respondents--in order to allow them to offer broadband to distant customers.

Survey respondents indicated that they are utilizing a variety of technologies to serve their customers. DSL is, by far, the most popular technology, utilized by 92% of survey respondents. Unlicensed wireless is next, utilized by 22% of survey respondents, followed by fiber to the home/fiber to the curb (7%), cable modem (6%), and licensed wireless (5%).[5] Nearly two-thirds of respondents are either currently, or considering, utilizing wireless broadband as a means of supplementing their DSL service, in order to better reach outlying customers.

More than 40% of survey respondents are facing competition from providers offering voice over Internet protocol (VoIP) within their service area. Nearly two-thirds perceive VoIP as a significant threat. The provision of broadband over power lines (BPL), on the other hand, is not yet perceived to be a dangerous threat. Just over 40% of survey respondents currently offer video services to their customers, and an additional 33% plan to do so by year-end 2006.

Rural companies are busy deploying fiber to better improve their ability to provide advanced services. Half of survey respondents expect to provide fiber to the

[5] Totals exceed 100% as respondents may utilize more than one technology to provide broadband service.

node to more than 80% of their customers by the end of this year. More than 12% plan to offer fiber to the home to more than 40% of their customers by year-end 2006.

Survey respondents keenly recognize the importance of fiber deployment. Responses show the perceived value of fiber deployment per the cost to grow over the next three years, to the point where two-thirds of all respondents feel the future benefits will be significant. Respondents were asked about the most significant barriers they faced in the deployment of fiber. More than three-quarters cited the cost of deployment, and more than half indicated regulatory uncertainty.[6] Just under half indicated that long loops and low customer demand were impediments to their fiber deployment plans.

## II. REASONABLE AND TIMELY DEPLOYMENT TO RURAL CUSTOMERS

As has been discussed earlier, rural deployment of broadband capabilities is impressive, but not pervasive. In areas served by rural ILECs many rural towns and areas close to these towns offer DSL service, but most rural areas more than 5 to 7 miles from existing rural ILEC switches do not have broadband service. While a majority of rural households can order DSL service today, a substantial minority cannot obtain broadband service from their rural ILEC. Survey data suggests a gradual extension of DSL service into these high cost areas. Absent specific broadband incentives, however, it is likely to be years and years before all rural households can order DSL or other broadband service. Special incentive programs targeted to extend broadband service to these unserved broadband areas will be needed for deployment to be accomplished on a reasonable and timely basis.

[6] Totals exceed 100% as respondents were permitted to select more than one response.

## III. ACTIONS THAT CAN BE TAKEN TO ACCELERATE DEPLOYMENT

The Commission needs to consider the implications of a diverse rural marketplace. The rural environment is not monolithic. It is very diverse. As part of the Broadband Survey, NTCA asked respondents to explicitly detail actions that the Commission could undertake that would accelerate the pace of broadband deployment in their part of rural America. One important reoccurring theme was the need for regulatory certainty. Rural providers who wish to provide advanced telecommunications services must invest significant sums of money in order to do so. Fear of significant changes in the regulatory arena can be enough to compel rural providers to postpone, or, in extreme cases, cancel these investments. The rural customer, who is then unable to obtain service, ends up paying the price. Regulatory certainty concerning the classification of various types of broadband services, universal service, and access charges would assist in creating future incentives to deploy advanced services.

For small companies, universal service support is critical. Unless they are certain that the support will continue into the foreseeable future, they may again be forced to postpone important investment decisions. Numerous survey respondents emphasized the importance of requiring VoIP service providers to pay for their fair share of use of the network. As VoIP grows in popularity, this issue will become increasingly important. NTCA members have invested dearly in the construction and maintenance of their networks; it is only just that carriers who seek to benefit themselves from the use of these networks pay their fair share of the cost.

## IV. CONCLUSION

For the above-noted reasons, the FCC should take the necessary steps to provide rural carriers with a sense of regulatory certainty, to continue to develop rural broadband incentive programs targeted toward unserved areas, and to ensure that all providers that use rural ILEC networks are required to pay their fair share of network costs.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Gail Malloy, certify that a copy of the foregoing Comments of the National Telecommunications Cooperative Association in GN Docket No. 04-54, FCC 04-55 was served on this 10th day of May 2004 by first-class, U.S. Mail, postage prepaid, to the following persons.

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